

Committees: Streets and Walkways Sub (for decision) Projects and Procurement Sub (for information)	Dates: 09 July 2024 15 July 2024
Subject: Climate Action Strategy, Cool Streets and Greening Programme – Phase 4 SuDS (Sustainable Urban Drainage) for Climate Resilience Unique Project Identifier: <i>PV Project ID 12267</i>	Gateway 4: Detailed Options Appraisal
Report of: Executive Director Environment Report Author: Marta Woloszczuk, Policy and Projects, City Operations	For Information
<h1 style="margin: 0;">PUBLIC</h1>	

1. Status update	Project Description 1.1. Cool Streets and Greening is a £6.8m Climate Action Strategy programme to pilot climate resilient streets and open spaces in the Square Mile. 1.2. In November 2023 a Gateway 4 report was approved for Phase 4 which set out proposals for six SuDS projects. This report specified that further details of the designs for Ludgate Broadway, St Andrew’s Hill and Lloyds Avenue would be brought back to this Committee for consideration. 1.3. Detailed designs for Ludgate Broadway and St Andrew’s Hill have now been prepared and this report seeks approval to progress these to Gateway 5. A separate Gateway 4 report for Lloyds Avenue will follow in the autumn. 1.4. Ludgate Broadway Replacing the current temporary 'parklet' with a permanent design comprising a widened pavement, a raingarden and tree planting. Associated accessibility and paving works with a raised carriageway and new raised crossing points at Pilgrim Street and Carter Lane junctions are also included. Two options have been prepared for Members
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	<p>consideration – set out in the Options appraisal section.</p> <p>1.5. St Andrew’s Hill Introduction of a rain garden and tree planting, with associated pavement adjustments. This project requires the relocation of a parking bay to facilitate the rain garden.</p> <p>RAG Status: Green (Amber at last report to Committee)</p> <p>Risk Status: Medium (Medium at last report to committee)</p> <p>Total Estimated Cost of Project post-Gateway 5 (excluding risk): <i>Ludgate Broadway: £440,000 - £475,000 (Option 1)</i> <i>St Andrew’s Hill: £190,000 – £220,000</i></p> <p>Change in Total Estimated Cost of Project (excluding risk): N/A</p> <p>Spend to Date: £594,824 as part of the whole Cool Streets and Greening programme preparation and design</p> <p>Costed Risk Provision Utilised: None</p> <p>Funding Source: Cool Streets & Greening Programme (OSPR), S106, S278</p> <p>Slippage: The project has been delayed due to the need to assess design options in more detail, to ensure that proposed option best meets the needs of all users. The projects are now expected to be completed by spring 2025.</p>
<p>2. Next steps and requested decisions</p>	<p>Next Gateway: Gateway 5 (Authority to start work) – delegated to Chief Officer</p> <p>Next Steps:</p> <ul style="list-style-type: none"> • Finalise construction package produced in collaboration with Highways Team • Undertake and finalise the legal processes including statutory public consultation to relocate the parking bays and introduce waiting and loading restrictions for the raised carriageway. • Undertake trial holes and infiltration tests to confirm the design of the raingardens • Develop construction programme with the City’s Highways Term contractor. • Gateway 5 approval (October 2024) • Construction – start on site early 2025 utilising City’s Highways Term contractor <p>Requested Decisions: It is recommended that the Streets and Walkways Sub-Committee:</p>

- I. Approve the budget adjustment/increase as per the Table 2 in Appendix 4 in order to fund the staff costs and fees required to reach the next gateway (£35K budget adjustment and £40K budget increase).
- II. Approve the design of the projects as set out in this report, including recommended option 1 for Ludgate Broadway;
- III. Approve the funding strategy for the Ludgate Broadway project as set out in Table 4 in Appendix 4 and note the total estimated project cost (excluding risk) is £440,000 - £475,000 for Option 1.
- IV. Note that the cost of the improvements at St Andrew's Hill is £190,000 – £220,000.
- V. Delegate approval and drawdown of the Costed Risk Provision to the Chief Officer if sought at Gateway 5.
- VI. Approve to undertake and complete the statutory processes and consultation for the proposed relocation of parking bays, changes to the waiting and loading restrictions and the raised carriageways, as set out in this report.
- VII. Authorise the Executive Director Environment to consider responses to the traffic order consultation and if they consider it appropriate, to make the Order.

3. Resource requirements to reach next Gateway

Table 2: Adjustment Required to reach the next Gateway

Description	Approved Budget (£)	Adjustment Resources Required (£)	Revised Budget (£)
16800454: CAS - Cool Streets & Greening			
Env Servs Staff Costs	101,000	10,000	111,000
Open Spaces Staff Costs	15,000	-	15,000
P&T Staff Costs	140,000	10,000	150,000
P&T Fees	379,000	13,000	392,000
Smart Sensors	165,000	(35,000)	130,000
Total 16800454	800,000	(2,000)	798,000
16100454: CAS - Cool Streets & Greening			
P&T Fees	10,000	-	10,000
Total 16100454	10,000	-	-

			10,000
Ludgate Broadway SUDs			
Env Servs Staff Costs	-	10,000	10,000
P&T Staff Costs	-	10,000	10,000
P&T Fees	-	22,000	22,000
Total Ludgate Broadway	-	42,000	42,000
GRAND TOTAL	810,000	40,000	850,000

Additional fees and staff costs are required to reach the next gateway. This will include trial holes and infiltration tests as well as engagement with local occupiers, project management and finalisation of design.

Costed Risk Provision requested for this Gateway: None

4. Overview of project options

4.1. Ludgate Broadway

Both options include replacing the current temporary 'parklet' with a permanent design comprising a widened pavement, a raingarden and tree planting. Various configurations have been worked through to optimise the space available for people walking and wheeling, whilst also providing greenery, sustainable drainage and space for tables and chairs from the adjacent cafes. Essential space for on-street loading has also been retained. It is acknowledged that there are a lot of competing demands within this small area for kerbside space.

During the design development, an option was considered to omit the raingarden and instead provide more pavement space for people walking and wheeling, or to accommodate more café tables and chairs. However, additional greenery in this location will enhance the local environment and introduce climate resilience into the streetscape which is a key objective of the Climate Action Strategy and Corporate Plan. Greening in this location was also strongly supported in the recent consultation on the Fleet Street Healthy Streets Plan where comments were also made about encouraging a 'public space' feel in the street. It is acknowledged that a wider pavement here will provide more space for walking or for café tables and chairs. However, on balance, it is considered that the modestly-sized raingarden provides additional environmental and public realm benefits and therefore, this proposal is recommended.

Both options in this report include raising and resurfacing

the carriageway along the entire length of Ludgate Broadway, to create an accessible and more comfortable street environment for people walking and wheeling. This encompasses the junction with Carter Lane at the southern section and both junctions with Pilgrim Street at the northern section. The resurfacing material options for the carriageway that are being considered are granite setts or asphalt (see options below).

This scheme is proposed to be delivered using a mix of different funding sources. The Cool Streets and Greening programme will fund the raingarden, planting and associated pavement alterations. The Pilgrim Street S278 project (which has already been approved and the scope is fully incorporated within the design of this project) will fund the raised crossing and associated changes at the junction with Pilgrim Street and the remainder of the costs will be funded from S106 receipts that have been allocated to the Fleet Street area programme along with an underspend from the Barts Close S106 that the developer has agreed can be used for this project. The funding strategy and the various funding sources are detailed in Appendix 4.

4.2. Option 1

Recommended: Ludgate Broadway carriageway resurfacing is recommended to be finished in granite setts and raised. There are three areas adjacent to Ludgate Broadway that already have granite setts, so the recommendation is to keep a consistent design throughout the scheme. Also, the S278 for Pilgrim Street has already been agreed as granite sets. Furthermore, this is a conservation area, so traditional, high-quality granite setts are more appropriate here.

A maintenance sum for granite setts is included in the budget. Some of the existing granite setts are planned to be relayed to get a more uniform finish which will assist with maintenance in the future. This also aligns with the circular economy approach.

4.3. Option 2

Not recommended: Ludgate Broadway carriageway resurfacing to be done as asphalt and raised. This option is a lower-cost option (by approx. £65K). However, it is not recommended as it will not enable the 'joining up' of the existing areas of granite setts thereby resulting in a patchwork appearance that is not ideal for this conservation area.

4.4. Ludgate Broadway and Pilgrim Street: Healthy Streets Design Check (refer to Appendix 5):

The current condition of the streets and the proposed changes were assessed using the Healthy Streets Design Check.

The evaluation has concluded that the Healthy Streets scoring of the area will be improved as a result of providing wider pavements, raised crossing points with tactile paving and an improved quality and finish of the paving materials. The introduction of permanent greenery and seating also improved the outcome of the Healthy streets assessment.

There are remaining 0 scores in the assessment as a result of some sections of the pavement still being less than 1.5m wide. These cannot be addressed because of the narrow width of the streets and the continued need for vehicle access which does not leave enough space to widen the pavements.

4.5. Ludgate Broadway and Pilgrim Street: City of London Street Accessibility Tool (CoLSAT):

The proposed changes will provide a more accessible street environment, with raised pedestrian crossings, tactile paving and improved finishes. The summary of the CoLSAT evaluation is included in the table below.

The remaining 0 and 1 scores are largely a result of the remaining sections of narrow pavement as mentioned above in the Healthy Streets analysis. The carriageway has been raised to mitigate the impacts of the narrow pavements. However, it is recognised that the raised carriageway and resultant removal of the kerb upstand will result in a 0 score for long cane users walking alongside the flush kerb. However, this short street has very low vehicle numbers and vehicle speeds and tactile paving is being introduced at crossing points.

The proposals for Pilgrim Street crossings also result in a notable improvement for most users.

Table 1 - CoLSAT Summary Results Table. Ludgate Broadway improvements				
	Total 0 scores* – severe accessibility issue		Total 1 scores** - significant accessibility issues	
	Before	After	Before	After
Electric Wheelchair user	0	0	3	3

Manual Wheelchair user	0	0	2	2
Mobility Scooter user	0	0	1	1
Walking Aid user	0	0	2	2
Person with a walking impairment	0	0	4	3
Long cane user	1	1	2	2
Guide Dog user	1	1	1	1
Residual Sight user	0	0	3	2
Deaf or Hearing impairment	0	0	4	3
Acquired neurological impairment	1	1	1	1
Autism/Sensory-processing diversity	0	0	2	2
Developmental Impairment	1	0	4	5
Total	4	3	29	27

Table 2 - CoLSAT Summary Results Table. Pilgrim Street improvements

	Total 0 scores* – severe accessibility issue		Total 1 scores** - significant accessibility issues	
	Before	After	Before	After
Electric Wheelchair user	0	0	4	3
Manual Wheelchair user	0	0	3	2
Mobility Scooter user	0	0	1	1
Walking Aid user	0	0	2	2
Person with a walking impairment	0	0	5	3
Long cane user	2	1	2	2
Guide Dog user	2	1	1	1
Residual Sight user	0	0	4	2

Deaf or Hearing impairment	0	0	4	3
Acquired neurological impairment	1	1	2	1
Autism/Sensory-processing diversity	0	0	2	2
Developmental Impairment	1	0	6	5
Total	6	3	36	27

4.6. St Andrew's Hill

The proposal incorporates a raingarden, a tree (subject to trail hole) and widened pavement on the western side, along with the re-positioning of cycle racks. The location of the interventions is in the central section of the street adjacent to the existing motor vehicle closure point. The raingarden will extend into an existing parking bay, which will be relocated to the northern part of St Andrew's Hill, thereby providing the space needed for the raingarden whilst still retaining space for loading/unloading. The proposal also retains pedal cycle access. Subject to further investigation, a new tree will be planted in the pavement on the south side of the raingarden. A single seat will also be provided. There is also an opportunity to introduce permeable paving (subject to underground utilities). This proposal is a relatively simple intervention, therefore only one option is being proposed.

It is recognised that there is a need to carry out further accessibility improvements on this street. However, at present there are no funds allocated for these works. Funding sources will be investigated as part of the ongoing Fleet Street area programme.

4.7. St Andrews Hill: Healthy Streets Design Check (refer to Appendix 5):

The current condition of the street and the impact of the proposals were assessed utilising the Healthy Streets Design Check. The evaluation concluded that the Healthy Streets scoring of the area will be improved as a result of providing greenery and seating.

There are remaining 0 scores as a result of some sections of the pavement still being less than 1.5m wide. These cannot be addressed because of the narrow width of the street and the continued need for vehicle access and parking which does not leave enough space to widen the

pavements.

4.8. St Andrews Hill: City of London Street Accessibility Tool (CoLSAT):

A CoLSAT evaluation has been undertaken which has shown little change to the scores because of the minor nature of the changes to the small section of the street. However, the provision of seating and some widening of the pavements will provide more space to walk, wheel and rest which is an improvement over the existing street layout.

	Total 0 scores* – severe accessibility issue		Total 1 scores** - significant accessibility issues	
	Before	After	Before	After
Electric Wheelchair user	0	0	3	3
Manual Wheelchair user	0	0	2	2
Mobility Scooter user	0	0	1	1
Walking Aid user	0	0	2	2
Person with a walking impairment	0	0	2	2
Long cane user	3	3	1	1
Guide Dog user	2	2	2	2
Residual Sight user	0	0	4	4
Deaf or Hearing impairment	0	0	3	3
Acquired neurological impairment	1	1	1	1
Autism/Sensory-processing diversity	0	0	2	2
Developmental Impairment	1	1	6	6
Total	7	7	29	29

5. Recommendation

5.1. Ludgate Broadway: Option 1 is recommended for the reasons set out above.

5.2. St Andrew’s Hill: Approval is also sought for the design to be taken forward to the next gateway.

<p>6. Risk</p>	<p>6.1. The main risks are as follows:</p> <ul style="list-style-type: none"> • Utilities and underground structures restrict the ability to implement the schemes. <p>Response: Ground investigations including radar surveys have been carried out for all sites. Further trial holes are needed to confirm underground conditions.</p> <ul style="list-style-type: none"> • Objections from local occupiers <p>Response: Initial consultation has been undertaken with local occupiers with positive responses and further engagement is planned as the designs are developed.</p> <ul style="list-style-type: none"> • Cost escalation as a result of inflation or other factors <p>Response: initial cost estimates have been produced and the proposed cost range is sufficient to cover the project costs including maintenance of planting and paving.</p> <p>6.2. Costed Risk Provision Utilised at Last Gateway: None Change in Costed Risk: None</p> <p>Further information is available in the Risk Register (Appendix 2)</p>
<p>7. Procurement strategy</p>	<p>7.1. A procurement exercise will be undertaken to appoint a SuDS consultant to provide technical advice on the design.</p> <p>7.2. All works will be undertaken by the City's highway term contractor FM Conway</p>

Appendices

Appendix 1	Project Coversheet
Appendix 2	Risk Register
Appendix 3	Plans and Sketches
Appendix 4	Finance Tables
Appendix 5	Healthy Street Assessment
Appendix 6	CoLSAT Summary

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Options Appraisal Matrix – For Ludgate Broadway only (there is only one option proposed for St Andrew’s Hill)

Option Summary	Option 1	Option 2
1. Brief description of option	<p>This option proposes a raised carriageway in granite setts.</p> <p>The scheme aims to replace the current temporary 'parklet' with a permanent design comprising a widened pavement, a raingarden and tree planting. Associated accessibility, increased waiting and loading restrictions and paving works with a raised carriageway are proposed in granite sets. Additionally, there are new raised crossing points at Pilgrim Street (approved for implementation) and Carter Lane junctions also proposed in granite sets.</p>	<p>This option proposes a raised carriageway in asphalt.</p> <p>The scheme aims to replace the current temporary 'parklet' with a permanent design comprising a widened pavement, a raingarden and tree planting. Associated accessibility, increased waiting and loading restrictions, and paving works with a raised carriageway are proposed in asphalt. Additionally, there would be new raised crossing points at Pilgrim Street (approved for implementation) and Carter Lane junctions proposed in asphalt.</p>
2. Scope and exclusions	Please see plans and sketches in Appendix 3	A separate plan has not been produced for this option as the difference in design only relates to materials
Project Planning		
3. Programme and key dates	<p>Key dates:</p> <ul style="list-style-type: none"> • Finalise drawings and surveys – September 2024 • Traffic Order Process – July - October 2024 • Gateway 5 delegated to Chief Officer – October 2024 	Same as Option 1

Option Summary	Option 1	Option 2
	<ul style="list-style-type: none"> • Start on site early 2025 	
4. Risk implications	Please refer to the main report	Same as Option 1
5. Stakeholders and consultees	<p>Local occupiers and stakeholders were consulted in autumn 2023 on the concept design and further consultation will be carried out in July 2024 on the detailed design once approved.</p> <p>This includes letters posted to all local occupiers and information on the website.</p>	Same as Option 1
6. Benefits of option	<p>This option proposes granite setts to the carriageway and a raised carriageway to provide one level. The benefits of this option are as follows:</p> <ul style="list-style-type: none"> - A consistent design approach to join up existing areas of granite setts at Carter Lane and Blackfriars Lane. - Raised carriageway enables people walking or wheeling to get past narrow pavements. - The S278 design for Pilgrim Street junction has already been agreed as granite setts - This is a conservation area and so traditional high-quality materials are more appropriate here - This area has a very low amount of traffic and is not a through-route. It also has a number of retail and café facilities, therefore the granite setts will create an enhanced public realm and pedestrian environment. - The waiting and loading restrictions keep 	<p>This option proposes standard asphalt to the carriageway and a raised carriageway to provide one level. The benefits of this option are as follows:</p> <ul style="list-style-type: none"> - This is a lower cost option (approx. £65K less than Option 1) - Raised carriageway enables people walking or wheeling to get past narrow pavements. - Black asphalt provides a higher visual contrast with York Stone which is beneficial for people with certain visual impairments. - The waiting and loading restrictions keep essential crossing areas clear of obstruction particularly for people crossing. - Space is retained to accommodate local servicing requirements.

<i>Option Summary</i>	<i>Option 1</i>	<i>Option 2</i>
	<p>essential crossing areas clear of obstruction particularly for people crossing.</p> <ul style="list-style-type: none"> - Space is retained to accommodate local servicing requirements. 	
7. Disbenefits of option	<p>This option proposes granite sets to the carriageway. The disbenefits of this option are as follows:</p> <ul style="list-style-type: none"> - Higher cost (approx. £65K higher than Option 2) - Lower visual contrast with York Stone (for those that require visual contrast to navigate the streets) - More expensive and disruptive to maintain. 	<p>This option proposes standard asphalt to the carriageway. The disbenefits of this option are as follows:</p> <ul style="list-style-type: none"> - The opportunity to provide a consistent material and appearance to join up the existing areas of granite sets will be missed resulting in a patchwork appearance - This is a conservation area and the aesthetics of this finish are less attractive than higher-quality granite setts - The design for the S278 for Pilgrim Street has already been agreed to be constructed in granite sets
Resource Implications		
8. Total estimated cost	Total estimated cost post Gateway 5 (excluding risk): £440,000 - £475,000	Total estimated cost post Gateway 5 (excluding risk): £385,000 - £410,000

<i>Option Summary</i>	<i>Option 1</i>	<i>Option 2</i>														
9. Funding strategy	<p>The table below sets out the funding strategy for the project post Gateway 5:</p> <table border="1"> <thead> <tr> <th colspan="2">Table 4: Funding Strategy - Ludgate Broadway</th> </tr> <tr> <th>Funding Source</th> <th>Amount (£)</th> </tr> </thead> <tbody> <tr> <td>OSPR - CAS: Cool Streets and Greening</td> <td>250,000</td> </tr> <tr> <td>Pilgrim Street S278</td> <td>150,000</td> </tr> <tr> <td>S106 - Barts Close - 12/00256/FULEIA - Transport</td> <td>66,156</td> </tr> <tr> <td>S106 earmarked for Fleet Street Area Healthy Streets Plan Delivery*</td> <td>8,844</td> </tr> <tr> <td>TOTAL</td> <td>475,000</td> </tr> </tbody> </table> <p>*This is the funding source identified for the CRP if one is required at Gateway 5</p>	Table 4: Funding Strategy - Ludgate Broadway		Funding Source	Amount (£)	OSPR - CAS: Cool Streets and Greening	250,000	Pilgrim Street S278	150,000	S106 - Barts Close - 12/00256/FULEIA - Transport	66,156	S106 earmarked for Fleet Street Area Healthy Streets Plan Delivery*	8,844	TOTAL	475,000	If this option is chosen the Cool Streets and Greening Programme allocation and S278 allocation will be reduced
Table 4: Funding Strategy - Ludgate Broadway																
Funding Source	Amount (£)															
OSPR - CAS: Cool Streets and Greening	250,000															
Pilgrim Street S278	150,000															
S106 - Barts Close - 12/00256/FULEIA - Transport	66,156															
S106 earmarked for Fleet Street Area Healthy Streets Plan Delivery*	8,844															
TOTAL	475,000															
10. Investment appraisal	N/A	N/A														
11. Estimated capital value/return	N/A	N/A														

<i>Option Summary</i>	<i>Option 1</i>	<i>Option 2</i>
12. Ongoing revenue implications	The cost estimate includes maintenance for 20 years	The cost estimate includes maintenance for 20 years
13. Affordability	The funding strategy has been agreed through the previous committee approvals.	The funding strategy has been agreed through the previous committee approvals.
14. Legal implications	N/A	If the asphalt option is chosen the S278 for Pilgrim Street will need to be renegotiated
15. Corporate property implications	None	None
16. Traffic implications	<p>Loading and waiting restrictions are proposed to ensure crossing points are key areas are not obstructed by vehicles.</p> <p>The area available for loading and unloading has reduced but it is envisaged that remaining space together with those available nearby should be sufficient to accommodate the demand.</p>	<p>Loading and waiting restrictions are proposed to ensure crossing points are key areas not obstructed by vehicles.</p> <p>The area available for loading and unloading has reduced but it is envisaged that remaining space together with those available nearby should be sufficient to accommodate the demand.</p>
17. Sustainability and energy implications	Rain gardens are shallow planting beds, designed to collect rainwater run-off from adjacent paved areas and thereby slow the movement of rainwater into the sewer system. The added benefits of these gardens are that they also soften the urban environment, enhance the public realm, support climate resilience and enhance biodiversity.	Rain gardens are shallow planting beds, designed to collect rainwater run-off from adjacent paved areas and thereby slow the movement of rainwater into the sewer system. The added benefits of these gardens are that they also soften the urban environment, enhance the public realm, support climate resilience and enhance biodiversity.

Option Summary	Option 1	Option 2
	<p>These SuDS schemes will help to establish a new way of designing the City's public realm whereby environmental resilience measures including SuDS and planting are a high priority and therefore become more prevalent, enabling the City to better adapt to climate change. These features aim to reduce the rates of surface water entering the combined sewer systems, reducing the impact of intense rainfall.</p>	<p>These SuDS schemes will help to establish a new way of designing the City's public realm whereby environmental resilience measures including SuDS and planting are a high priority and therefore become more prevalent, enabling the City to better adapt to climate change. These features aim to reduce the rates of surface water entering the combined sewer systems, reducing the impact of intense rainfall.</p>
18. IS implications	N/A	N/A
19. Equality Impact Assessment	<p>The Equality Impact Assessment has been completed and the design adapted to take it into account.</p> <p>The proposed improvements are likely to positively benefit people of all ages, including the elderly and younger people.</p> <p>The proposals to improve the pavements and crossings along Ludgate Broadway, would benefit both elderly and younger users and help to address some of the key barriers to active travel for the elderly population. The flush surfaces of the raised carriageway sections will also benefit all users but particularly those who have limited mobility, are reliant on mobility aids or are travelling with young children in pushchairs.</p>	<p>The Equality Impact Assessment has been completed and the design adapted to take it into account.</p> <p>The proposed improvements are likely to positively benefit people of all ages, including the elderly and younger people.</p> <p>The proposals to improve the pavements and crossings along Ludgate Broadway, would benefit both elderly and younger users and help to address some of the key barriers to active travel for the elderly population. The flush surfaces of the raised carriageway sections will also benefit all users but particularly those who have limited mobility, are reliant on mobility aids or are travelling with young children in pushchairs.</p>

<i>Option Summary</i>	<i>Option 1</i>	<i>Option 2</i>
20. Data Protection Impact Assessment	N/A	N/A
21. Recommendation	Recommended	Not recommended